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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,955	02/16/2001	Martina Wicher	421 P 037	5781

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EXAMINER

PAULRAJ, CHRISTOPHER

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 04/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/785,955

Applicant(s)

WICHER ET AL.

Examiner

Christopher G. Paulraj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8,10-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,10-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The amendment filed on January 21, 2003 has been entered. Claims 1-6, 8, 10-18, and 20-23 are pending.
2. Claims 12-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1, 3-5, 8-11, 15, and 17-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. The terms "less than about," "at least about," and "a maximum of about" are indefinite because there is nothing in the specification or the prior art to provide any indication as to what specific range is covered by the term "about." The terms "less than," "at least," and "a maximum of" each connote a specifically set maximum or minimum value. However, the definitiveness of these values is obfuscated by the use of the term "about."

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 8, 10-11, and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haskins et al. (U.S. Patent 5,861,209) in view of Husband (U.S. Patent 5,731,034) and Govers (EP 0 952 483).

Haskins et al. discloses a paper coated with a precipitated calcium carbonate (PCC) coating pigment composition in which the pigment has a particle size distribution such that 0 % to 25 % of the particles have a diameter of less than 0.4  $\mu\text{m}$ , from about 40% to 60% of the particles have a diameter of from about 0.4  $\mu\text{m}$  to 1.0  $\mu\text{m}$ , from about 10 % to about 35 % of the particles have a diameter of about 1  $\mu\text{m}$  to about 3  $\mu\text{m}$ , and from 0 % to about 20 % of the particles have a diameter of 3  $\mu\text{m}$  to 10  $\mu\text{m}$  (col. 10, lines 3-13). The coating may be applied at an amount of 6  $\text{g}/\text{m}^2$  (col. 9, lines 63-64). The surface of the calcium carbonate is considered to be modified when it is mixed with other inorganic substances such as titanium oxide, talc, calcined clay, etc. (col. 4, lines 66-67). While the exact particle size distribution ranges specified in the instant claims are not disclosed, the ranges disclosed by Haskins et al. overlap with the claim requirements and are therefore considered to anticipate the instant claims.

Alternatively, in the absence of establishing criticality/unexpected results of providing at least 40 weight % of particles having a grain size of 0.35 to 0.8  $\mu\text{m}$ , one skilled in the art

would have found it obvious to adjust the particle size distribution of the pigments disclosed in Haskins et al. to meet the claim requirements. The motivation for doing so would have been to optimize the "missing dot performance" of the coating (see col. 1, lines 15-17).

Although calcined clay may be used with the calcium carbonate pigments (see col. 4, lines 66-67), Haskins et al. does not specifically disclose that the coating containing the pigment mixture contains at least 30 % by weight of kaolin. However, Husband discloses a similar calcium carbonate pigment containing coating for paper that can also include additional inorganic substances with a plate-like structure such as kaolin clay (col. 2, lines 17-20). These inorganic substances are considered to modify the surface of the calcium carbonate particles. In the absence of establishing criticality/unexpected results, one skilled in the art would have found it obvious to adjust the amount of kaolin to at least 30 % by weight. The motivation for doing so would have been to optimize the printability of the coating.

Haskins et al. also does not specifically disclose that the density of the raw paper is less than 1 g/cm<sup>3</sup>. However, in the absence of establishing criticality/unexpected results, one skilled in the art would have found it obvious to select a paper having a density within the claimed range. The motivation for doing so would have been to minimize the weight of the coated paper.

Haskins et al. also does not specifically disclose that the paper is coated with a synthetic polyolefin resin on the pigment coating. However, Govers discloses a similar coated base paper for photographic printing paper that is coated on at least one surface

with a polyolefin synthetic resin (see paragraphs [0052]-[0053]). One skilled in the art would have found it obvious to coat the surface of the pigment coating of Haskins with such a layer. The motivation for doing so would have been to optimize the appearance of the paper. In the absence of establishing criticality/unexpected results, one skilled in the art would have found it obvious to adjust the coating amount of the synthetic resin to within the claimed range. The motivation for doing so would have been to optimize the printability and appearance of the coating.

### ***Response to Arguments***

8. Applicants arguments with respect to the pending rejections have been considered but are unpersuasive for the following reasons. With respect to the 112, 2<sup>nd</sup> paragraph rejection for the use of “about,” Applicants argue that the MPEP §2173.05(b)A expressly condones the use of the term. This is unpersuasive because whether or not the term “about” renders the claims indefinite is determined on a case-by-case basis. While §2173.05(b)A cites to Ex parte Eastwood, 163 USPQ 316 (Bd. App. 1968) and W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), where the courts found the use of “about” not to be indefinite, the same section also cites to Amgen, Inc. v. Chugai Pharmaceutical Co., 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991), where the Federal Circuit held that claims reciting “at least about” were invalid for indefiniteness. If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the

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claim under 35 U.S.C. § 112, second paragraph would be appropriate. See Morton Int'l, Inc. v. Cardinal Chemical Co., 5 F.3d 1464, 1470, 28 USPQ2d 1190, 1195 (Fed. Cir. 1993). In the present case, nothing in the specification or prior art provides notice to one skilled in the art as to what constitutes the upper or lower limits of the claimed ranges.

Applicant's arguments with respect to the prior art rejections of the claims have been considered but are moot in view of the new ground(s) of rejection.

#### ***Information Disclosure Statement***

9. Receipt of Information Disclosure Statement filed on January 21, 2003 is acknowledged and has been made of record. Foreign language documents were only considered to the extent of what their English abstracts provided.

#### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher G. Paulraj whose telephone number is (703) 308-1036. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0661.



cgp  
April 3, 2003

  
Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700